CLAIMS

1. A dynamic weight generator comprising:

a first memory for storing a PN code;

a second memory for storing a plurality of weights, said second memory being coupled to said first memory whereby data output by said first memory is used to address data stored in said second memory; and

a correlator for multiplying an input signal by data output by said second memory.

2. The invention of Claim 1 wherein said weights are finite impulse response filter correlation coefficients.

3. The invention of Claim 1 wherein said correlator includes two multipliers.

4. The invention of Claim 3 wherein a first of said multipliers is coupled to a source of an in-phase component of said input signal.

5. The invention of Claim 4 wherein a second of said multipliers is coupled to a source of a quadrature component of said input signal.

6. The invention of Claim 5 further including means for summing the outputs of said multipliers.

7. The invention of Claim 1 wherein said input signal is a GPS signal.

8. A signal processing system comprising:

first means for receiving a signal and providing in-phase and quadrature signals in response thereto;

second means filtering said in-phase and quadrature signals with dynamic weights to provided weighted signals; and

third means for generating nulling and beamsteering weights for said weighted signals.

9. The invention of Claim 8 further including means for equalizing said signals.

10. The invention of Claim 8 further including means for partitioning said in-phase and quadrature signals in plural bands.

11. The invention of Claim 10 further including means for processing at least one of said bands in accordance with a space frequency adaptive processing scheme.

12. The invention of Claim 11 further including means for performing space time adaptive processing within at least one of said bands.

13. The invention of Claim 8 wherein said second means includes a finite impulse response filter.

14. The invention of Claim 13 wherein said filter is implemented with a dynamic weight processor.

15. The invention of Claim 14 wherein said dynamic weight processor includes:

a first memory for storing a PN code;

a second memory for storing a plurality of weights, said second memory being coupled to said first memory whereby data output by said first memory is used to address data stored in said second memory; and

a correlator for multiplying an input signal by data output by said second memory.

16. The invention of Claim 15 wherein said signal is a GPS signal.

17. A method for dynamic weight generation including the steps of:
storing a PN code in a first memory;
storing a plurality of weights in a second memory;
using an output of said first memory to access said second memory; and
multiplying an input signal by data output by said second memory.